

## Expectant management was as effective as D&C for spontaneous abortion

Nielsen S, Hahlin M. *Expectant management of first-trimester spontaneous abortion*. *Lancet*. 1995 Jan 14; 345:84-6.

### Objective

To compare expectant waiting with immediate dilatation and curettage (D&C) for women having had an inevitable or incomplete spontaneous abortion.

### Design

Randomised controlled trial with 2-week follow-up.

### Setting

A university hospital in Sweden.

### Patients

550 women were screened and 155 were enrolled (mean age, 32 y). Inclusion criteria were a positive pregnancy test and vaginal bleeding at hospital admission, abdominal pain, or both; good health and a normal blood count; gestational age < 13 weeks; clinical examination including transvaginal ultrasonography confirming an inevitable or incomplete spontaneous abortion with intrauterine tissue or blood clot with an anterior-posterior diameter of 15 to

50 mm; and a study physician available for counselling. Follow-up was complete.

### Intervention

Randomisation was based on a 2:1 ratio of waiting to D&C. All women were examined at 3 and 14 days; were told to avoid bathing and sexual intercourse for 2 weeks; used paracetamol alone or in combination with codeine for pain; and did not receive antibiotics. Women who were rhesus negative received 625 IU of anti-D immunoglobulin. 103 women were assigned to expectant management and were told to expect some bleeding or pain. D&C was done for unacceptable pain, extensive bleeding, or retained tissue with a diameter of > 15 mm on ultrasonography. 52 women were assigned to D&C, and they left the hospital 2 to 4 hours after D&C.

### Main Outcome Measures

Complications (purulent vaginal discharge, fever, tenderness over the uterus or adnexa during pelvic examination, high erythrocyte sedimentation rate, or an increase in C-reactive protein levels), days with pain that required analgesics, days with vaginal

bleeding that required sanitary protection, days away from work, and changes in packed-cell volume.

### Main Results

22 women (21%) in the waiting group subsequently had a D&C. 3 women (2.9%) in the waiting group compared with 6 women (11.5%) in the surgery group developed complications ( $P = 0.08$  for the Fisher permutation test). Women in the waiting group had more days of vaginal bleeding (8.8 vs. 7.5 d;  $P = 0.02$ ). The groups did not differ for days away from work, days with pain requiring analgesics, and change in packed-cell volume at 3 and 14 days.

### Conclusion

Expectant management for women with inevitable or incomplete spontaneous abortion was as effective as immediate dilatation and curettage for complications, days away from work, and days with pain requiring analgesics.

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For article reprint: Dr. S. Nielsen, Department of Obstetrics and Gynaecology, Sahlgrenska University Hospital, University of Gothenburg, S-41345 Gothenburg, Sweden. FAX 46-31-41-8717.

### Commentary

D&C is the standard gynaecological procedure for spontaneous abortion, and it is appropriate to discuss its almost universal use. The study by Nielsen and Hahlin was carefully designed and appropriately carried out. 160 of 550 women presenting in a 16-month period were studied, which suggests that the proposed conservative treatment was applicable to women who were carefully selected to exclude ectopic pregnancies, blighted ovum, and missed abortion. The study was restricted to gestations < 13 weeks. A thorough ultrasonographic examination was done with measurement of the intrauterine contents, and a detailed explanation was given to the patient and a re-examination was done 3 days later. By that time, 21% of women in the waiting group required evacuation, some on the first day.

The authors recommend serial human chorionic gonadotrophin estimations to exclude ectopic pregnancy. 79% of the patients coming through the unit during the 16-month period could have avoided having a D&C if the staff had been able to support them during that time and if regular additional monitoring and co-ordination had been in place. Although the difference in the frequency of complications did not reach significance ( $P = 0.08$ ), the frequency was 11% for D&C and only 3% for conservative management. This suggests that these complications are worth examining in a larger study. Certainly, the implied long-term fertility compromise is not known, although the Royal College of General Practitioners' long-term follow-up study of legal termination of pregnancy shows a reassuringly low

figure of longer-term infertility (1). In that study, the ratio of the fertility rate of the abortion group to that of the nonabortion group was 0.94 (95% CI, 0.83 to 1.07;  $P = 0.37$ ).

This study suggests that it would be rational to attempt conservative management in carefully selected patients with ultrasonographically confirmed incomplete or inevitable abortion, provided that the necessary monitoring and support systems were adequate.

Ian D. Cooke, MD  
The University of Sheffield  
Sheffield, United Kingdom

### Reference

1. Frank P, McNamee R, Hannaford PC, Kay CR, Hirsch S. The effect of induced abortion on subsequent fertility. *Br J Obstet Gynaecol*. 1993;100:575-80.